JUN 10 1991

GRIFFIN INTERNATIONAL INC

June 7, 1991

Mr. Cliff Loos
McAuliffe Office Products
50 Cherry St.
Burlington, VT 05401

Dear Mr. Loos:

On May 31st, Griffin International installed one soil boring, for the purpose of defining the extent of subsurface petroleum contamination, at the McAuliffe Office Products facility on Cherry Street, in Burlington. The subsurface contamination was first discovered during the removal of one, 1,000 gallon, underground, gasoline storage tank on April 6th, 1991.

The tank had been out of service for at least twenty years prior to its removal. Upon its removal, a small hole was discovered in the bottom of the west end of the tank. Concentrations of volatile organic compounds (V.O.C.'s) in soils directly beneath the tank ranged up to 140 ppm, as measured with a PID.

In response, the State of Vermont Department of Environmental Conservation (DEC) requested that an investigation be conducted to determine the vertical extent of the contamination and to determine if groundwater beneath McAuliffe's is contaminated. The investigation, conducted by Griffin, has included the drilling of a soil boring and field analysis of soil samples.

The soil boring was drilled by Green Mountain Boring, under the direct supervision of the Griffin Hydrogeologist. Drilling was accomplished with a hollow stem auger drill rig, using 4.25" inner diameter augers. The boring was drilled in approximately the location that the hole in the 1,000 gallon tank had been located. Undisturbed soil samples were collected from the borehole at five foot intervals, using a split spoon sampler. The hydrogeologist recorded soil characteristics of each sample and screened them for V.O.C.'s with a PID. The attached well log lists soil characteristics and V.O.C. concentrations in each soil sample collected.

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The well log indicates that V.O.C. concentrations increased from 0.5 ppm, at a depth of five (5) feet below grade to 110 ppm at a depth of ten (10) feet below grade. Beyond a depth of ten feet below grade, V.O.C. concentrations declined rapidly to non detectable at a depth of thirty (30) feet below grade. The soil sample retrieved from a depth of sixty (60) feet was dry, indicating that the water table is deeper that sixty feet.

As per the April 18, 1991 letter from the DEC to Chris Vogt, of McAuliffe, the borehole was ended at this depth and no monitoring well was installed. The borehole was backfilled with the drill cuttings to a depth of seventeen (17) feet below grade. The borehole was filled with bentonite pellets from a depth of seventeen (17) feet to thirteen (13) feet. The remainder of the hole was backfilled with drill cuttings.

In conclusion, it appears that adsorbed petroleum contamination beneath the former 1,000 gallon gasoline tank is concentrated between a depth of ten (10) feet below grade and fifteen (15) feet below grade. The adsorbed contamination does not extend to the water table in this vicinity and is likely not resulting in the contamination of the groundwater beneath this site. Planned repaving of the area will help to prevent possible flushing of the adsorbed contamination to the water table. Over time, the existing contamination will be degraded by natural processes.

Please call me if you have any questions regarding this investigation.

Sincerely,

Peter M. Murray
Project Hydrogeologist

cc: Chuck Schwer

PROJECT McAULIFFE OFFICE PRODUCTS

LOCATION BURLINGTON, VT

DATE DRILLED 5/31/91 TOTAL DEPTH OF HOLE 60'

DIAMETER 6"

SCREEN DIA. _____ LENGTH _____ SLOT SIZE _____

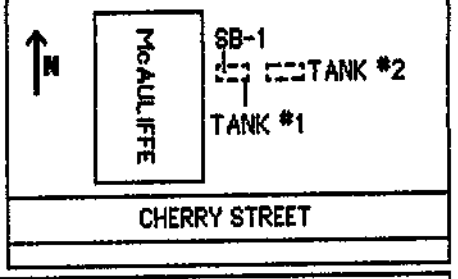
CASING DIA. _____ LENGTH _____ TYPE _____

DRILLING CO. GREEN MT BORING DRILLING METHOD HOLLOW STEM AUGER

DRILLER RON LOG BY P. MURRAY

WELL NUMBER SB-1

Sketch Map



DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0				
		NATIVE BACKFILL	5' - 7': 2,2,3,3	Moist, light brown SAND, 0.5 ppm
10			10' - 12': 3,5,8,7	Damp, very fine to fine SAND, 110 ppm
		BENTONITE	15' - 16.5': 4,5,6	Dry, fine to medium SAND, 2 ppm
20			20' - 21.5': 5,9,7	Damp, fine to medium SAND, few small pebbles, 0.2 ppm
		BOREHOLE WALL	25' - 27': 6,8,17,17	Tight, light colored, very fine to fine SAND, 0.1 ppm
30			30' - 32': 7,9,9,12	Damp, very fine SAND, trace silt, 0 ppm
		NATIVE BACKFILL	35' - 37': 12,19,15,14	Moist, very fine to fine SAND, 0 ppm
40			40' - 42': 14,15,15,25	Moist, tight, very fine sand with silty varves, 0 ppm
			45' - 47': 25,27,35,33	Dry, very fine to fine SAND, silt varves, 0 ppm
50			50' - 52': 24,58,49,45	Dry, very fine SAND, 0 ppm
			55' - 57': 9,19,28,27	Dry, fine SAND, 0 ppm
60			60' - 62': 12,18,19,17	Dry, fine SAND, 0 ppm

Griffin International

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
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